ABSTRACT

Surface cooled heat exchanger that includes a substantially planar shim plate with spaced apart integral first and second end walls extending laterally therefrom, and a separately formed cover plate having a central wall with integral first and second side walls extending from opposite sides of the central wall portion. The first and second side walls of the cover plate are sealably joined to respective side edges of the shim plate, the first and second end walls are sealably joined to respective ends of the cover plate. The central wall portion and shim plate are spaced apart with an internal fluid passage being defined therebetween with inlet and outlet openings provided in flow communication with the fluid passage to allow fluid to flow into. through, and out of the fluid passage. Includes a fin plate having a planar support wall with a first side abutting against and secured to the shim plate and an opposite facing second side along which a plurality of exposed cooling fins are provided. The end walls are each preferably formed from portions that have been partially cut from the planar shim plate and folded about a fold line to extend substantially perpendicular to the shim plate. Flow circuiting baffle plates may similarly be provided in the fluid passage.